

Title (en)

SECURING COMMUNICATION WITHIN A NETWORK ENDPOINT

Title (de)

SICHERN EINER KOMMUNIKATION INNERHALB EINES NETZWERK-ENDPUNKTS

Title (fr)

SÉCURISATION DE COMMUNICATIONS DANS UN POINT D'EXTRÉMITÉ DE RÉSEAU

Publication

**EP 3053324 B1 20171101 (EN)**

Application

**EP 14851449 A 20140923**

Priority

- US 201314045103 A 20131003
- US 2014056875 W 20140923

Abstract (en)

[origin: US2015101016A1] Systems and methods for securing communication within a network endpoint, for example, a meter. The meter may include a communication module and a metrology module where the modules are connected via a communication path that is external to both modules. The modules exchange a pairing key to establish a paired channel of communication. When the communication module receives a communication through a network for establishing a secure channel to the endpoint, the communications module sends some or all of the security data to the metrology module to establish a secure communication from a head-end system through the communication module to the metrology module.

IPC 8 full level

**H04L 29/06** (2006.01)

CPC (source: EP US)

**H04L 63/04** (2013.01 - EP US); **H04L 63/061** (2013.01 - US); **H04L 63/08** (2013.01 - EP US); **H04L 63/164** (2013.01 - US); **H04L 63/18** (2013.01 - US); **H04L 67/12** (2013.01 - EP US)

Citation (opposition)

Opponent : Diehl Metering GmbH

- EP 2506392 A1 20121003 - TOSHIBA KK [JP]
- US 2013254881 A1 20130926 - HELMSCHMIDT JUERGEN [DE], et al
- EP 2543974 A1 20130109 - NXP BV [NL]
- "Technische Richtlinie BSI TR-03109-1 Version 1.0", BUNDESAMT FÜR SICHERHEIT IN DER INFORMATIONSTECHNIK, 7 August 2013 (2013-08-07), XP055513122, Retrieved from the Internet <URL:https://web.archive.org/web/20130708082029/https://www.bsi.bund.de/DE/Themen/SmartMeter/TechnRichtlinie/TR\_node.html>
- "IP-Adresse", WIKIPEDIA, 23 September 2013 (2013-09-23), pages 1 - 8, XP055513129, Retrieved from the Internet <URL:https://de.wikipedia.org/w/index.php?title=IP-Adresse&oldid=122801374>
- "Open Metering System Specification", OMS, vol. 1, no. 1.4.0, 31 January 2011 (2011-01-31), pages 1 - 22, XP055513132
- "Lastenheft zur Beschreibung einer sicheren Anbindung von Gaszählern an Messsysteme nach Energiewirtschaftsgesetz. Version 0.15", DVGW DEUTSCHER VEREIN DES GAS- UND WASSERFACHES E.V., 12 October 2012 (2012-10-12), pages 1 - 12, XP055513139

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US9900296B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**US 2015101016 A1 20150409; US 9635054 B2 20170425;** BR 112016007210 A2 20170801; BR 112016007210 B1 20230314; CA 2919260 A1 20150611; CA 2919260 C 20200728; EP 3053324 A2 20160810; EP 3053324 B1 20171101; EP 3053324 B2 20201209; JP 2016535884 A 20161117; JP 6456929 B2 20190123; MX 2016004172 A 20160624; MX 353998 B 20180207; US 2017187698 A1 20170629; US 9900296 B2 20180220; WO 2015084468 A2 20150611; WO 2015084468 A3 20150827

DOCDB simple family (application)

**US 201314045103 A 20131003;** BR 112016007210 A 20140923; CA 2919260 A 20140923; EP 14851449 A 20140923; JP 2016519830 A 20140923; MX 2016004172 A 20140923; US 2014056875 W 20140923; US 201715459219 A 20170315